

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application.

1-8. (Cancelled)

9. (Currently Amended): A composite material, comprising:

a biodegradable polymeric material, and

calcium phosphate in the biodegradable polymeric material,

wherein the calcium phosphate is contained in the biodegradable polymeric material in a gradient of calcium phosphate that varies in the biodegradable polymeric material from a first side of said biodegradable polymeric material to ~~[[a]]~~ an opposite second side of said biodegradable polymeric material with an increasing linear gradient,

wherein the biodegradable polymeric material is selected from the group consisting of glycosaminoglycan, collagen, and a composite of glycosaminoglycan and collagen, and

wherein said gradient of calcium phosphate is formed by alternately soaking the opposite second side of the biodegradable polymeric material in a calcium ion-containing solution and the opposite second side of the biodegradable polymeric material in a phosphate ion-containing solution.

10. (Previously Presented): The composite material according to claim 9, wherein the biodegradable polymeric material is a crosslinked product of glycosaminoglycan and collagen.

11. (Previously Presented): A scaffold for cell differentiation and proliferation, comprising:

the composite material according to claim 9, and

one or more components selected from the group consisting of basic fibroblast growth factors (bFGF), vascular endothelial growth factors (VEGF), bone morphogenetic factors (BMP), and inorganic salts comprising calcium salt.

12-13. (Cancelled)

14. (Previously Presented): The scaffold according to claim 11, which further comprises cells.

15. (Currently Amended): A method for producing a composite material, comprising: ~~the~~
~~step(s) of:~~

providing a biodegradable polymeric material selected from the group consisting of glycosaminoglycan, collagen, and a composite of glycosaminoglycan and collagen, said biodegradable polymeric material having a first side and ~~[[a]]~~ an opposite second side, and

alternately soaking the opposite second side of the biodegradable polymeric material in a calcium ion-containing solution and the opposite second side of the biodegradable polymeric material in a phosphate ion-containing solution, whereby a gradient of calcium phosphate is formed that varies in the biodegradable polymeric material from the first side of said biodegradable polymeric material to the opposite second side of the biodegradable polymeric material with an increasing linear gradient.

16. (Previously Presented): The scaffold according to claim 11, wherein the scaffold is porous.

17. (Previously Presented): A scaffold for cell differentiation and proliferation, comprising:

the composite material according to claim 9,

wherein the gradient of calcium phosphate is a constant gradient.